ABSTRACT

A method for detecting computational errors in a digital processor executing a program. Initially, the program is divided into computation segments, and source code for at least one of the segments is compiled to generate two redundant code sections. Comparison code is generated for comparing results produced by execution of the two code sections. Each of the code sections is then executed in a different computational domain to generate respective results. The results of the computation are executed to alter further flow of the program only if the respective results are identical.